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|-------------------------------|------------------------|---------------------|--|
| Notice of Allowability | Application No. | Applicant(s) | |
| | 10/656,052 | YEN ET AL. | |
| | Examiner | Art Unit | |
| | Elliot L Frank | 2125 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicant's initial filing on 5 September 2003.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date attached.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) ✓ | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Howard Chen on 12 November 2004.
3. The application has been amended as follows:
 - a. Page 1, paragraph 3, line 3: a parenthesis, ")", has been inserted after the word "Planning".
 - b. Page 6, paragraph 20, line 5: the phrase "a specific state" has been changed to "a specific step".
 - c. Page 11, Paragraph 29, line 6: the item number "428" has been corrected to "430".
4. The following changes to the drawings have been approved by the examiner and agreed upon by applicant:
 - a. Figure 4: Item number "428" was used to indicate two different aspects of figure 4. The second instance of "428" which indicated a dotted line between items 402 and 404 has been corrected to "430". A redline copy of figure 4 is included.
 - b. In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

Examiner's Statement of Reasons for Allowance

5. The following is an examiner's statement of reasons for allowance:

a. The prior art or record, taken singly or in any reasonable combination, fails to teach or fairly suggest the claimed invention.

b. Specifically, claims 1,7 and 12 are independent. Claims 7 and 12 include at least all of the requirements of claim 1 which recites the following limitations:

A method for dynamically coordinating one or more product orders with product parts progressing through a manufacturing process flow, comprising:

identifying a first order for generating one or more lots of parts for manufacturing a first product, the first order identifying a predetermined base feature, one or more customer specific features, one or more order specific features, and the quantity of the first product;

assigning a smart code to the first order and the lots of parts, the smart code identifying an association between the first order and the lots of parts;

analyzing, based on the smart codes assigned thereto, whether one or more available lots of parts of a second order in production are ready to be converted to produce the first product; and

dynamically changing the smart code of the available lots to the smart code of the first order if the available lots of the second order are chosen to be further processed for fulfilling the first order.

c. The most relevant prior art of record is Toprac et al. (USPN 6,699,717 B1) in view of Maki et al. (USPN 5,307,261 A). Toprac et al. is a semiconductor

production system that may reprioritize lots yielding parts with different predicted performance grades in view of the order demand for the different grades. Given the broadest most reasonable interpretation of the prior art, Toprac et al. may reprioritize pending lots to meet specific customer demand, e.g. an order for a base part with a specific performance requirement (i.e. grade). However, Toprac et al. does not mention the order identification detail of claim 1, and further does not associate a specific lot with a specific order using a smart code.

- d. The addition of Maki et al. as a supporting reference does not cure the deficiencies of Toprac et al. Maki et al. is a change order control system that tracks the different customer specific aspects of a customer order. While Maki et al. does include some of the order specific features of the instant invention, it does not contain a smart code that connects specific orders with lots in a process wherein this code is used to reassign available lots to fulfill a customer order.
 - e. Therefore, the limitations of claim 1, in combination with the remaining elements and features of the claimed invention, were not disclosed nor fairly suggested by the prior art of record.
6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2002/0198619 A1 – Denton et al. – Production control

US 2003/0004595 A1 – Seimiya et al. – Production control

US 2004/0059650 A1 – Cruz et al. – Inventory system

USPN 5,311,424 A – Mukherjee et al. – Product configuration

USPN 5,325,304 A – Aoki – Production control

USPN 5,523,611 A – Mischel et al. – Configurable semiconductor

USPN 5,960,405 A – Trefethan et al. – Configurable semiconductor

USPN 6,222,212 B1 – Lee et al. – Configurable semiconductor

USPN 6,352,880 B1 – Takai et al. – Configurable semiconductor

USPN 6,448,152 B1 – Henley et al. – Production control

USPN 6,463,345 B1 – Peachey-Kountz et al. – Production control

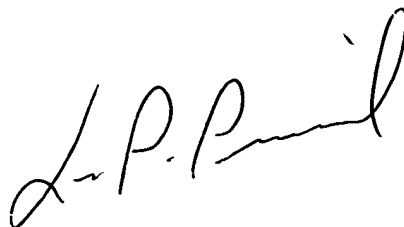
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elliot L Frank whose telephone number is (571) 272-3739. The examiner can normally be reached on M-F 8-5:00 (flex).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P Picard can be reached on (571) 373-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2125

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ELF
13 November 2004

A handwritten signature in black ink, appearing to read "L. P. Picard", with a stylized flourish at the end.

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100